



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/633,145	07/31/2003	Ken L. Chang	K35A1301	5429

35219 7590 03/03/2005

WESTERN DIGITAL TECHNOLOGIES, INC.
20511 LAKE FOREST DR. -C205
LAKE FOREST, CA 92630

EXAMINER

BLOUIN, MARK S

ART UNIT	PAPER NUMBER
----------	--------------

2653

DATE MAILED: 03/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/633,145	Applicant(s) CHANG ET AL.	
	Examiner Mark Blouin	Art Unit 2653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7/31/03</u> . | 6) <input type="checkbox"/> Other: ____ |

Detailed Action

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1 and 5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention:

The phrase "... being an integer in a range *between* 2 to 3." (Claim 1, line 14 and Claim 5, line 19) does not include endpoints 2 and 3. Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Loubier (USPN 5,656,877) in view of Budde et al (USPN 6,728,073)
5. Regarding Claims 1-8, Loubier shows (Figs. 1-4), a disk drive comprising a disk drive base, a spindle motor attached to the disk drive base, a disk supported on the spindle motor, a head stack assembly rotatably coupled to the disk drive base, the head stack assembly including a stamped actuator arm (40), a coil portion (20) attached to the stamped actuator arm a head gimbal assembly (Col 3, line 55) attached to the stamped actuator arm (Col 3, lines 55-58), the

Art Unit: 2653

head gimbal assembly including a trace suspension flex having a metal base layer and a plurality of conductors supported by the metal base layer (Col 5, lines 7-10), the stamped actuator arm including a bore defining a pivot axis (52), an actuator arm side surface extending longitudinally along the stamped actuator arm, and a plurality of longitudinally spaced apart stamped protrusions for supporting the trace suspension flex (See Examiner's Drawing), each stamped protrusion extending from the actuator arm side surface in a direction generally perpendicular to the pivot axis, but does not show the plurality of stamped protrusions being an integer in a range between 2 to 3, wherein the integer is 2 or 3, wherein the stamped protrusions are generally equally spaced apart longitudinally along the actuator arm side surface.

Budde et al shows (Fig. 4) the plurality of stamped protrusions being an integer in a range between 2 to 3, wherein the integer is 2 or 3, wherein the stamped protrusions are generally equally spaced apart longitudinally along the actuator arm side surface.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the actuator arm of Loubier with 2 to 3 equally spaced protrusions as taught by Budde et al. The rationale is as follows: One of ordinary skill in the art at the time the invention was made would have been motivated to provide the actuator arm of Loubier with 2 to 3 equally spaced protrusions as taught by Budde et al in order to support the trace suspension flex.

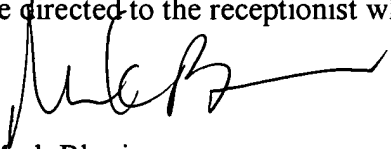
Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Blouin whose telephone number is (703) 305-5629. The examiner can normally be reached M-F, 6:00 am – 3:30 pm.

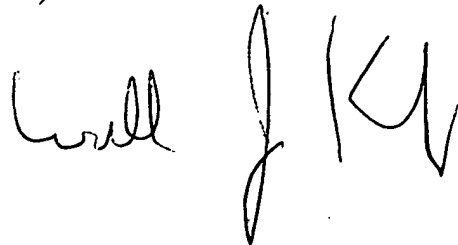
Art Unit: 2653

If attempts to reach the examiner by telephone are unsuccessful the examiner's supervisor, William Korzuch can be reached at (703) 305-6137. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314 for regular and After Final communications.

Any inquiry of general nature or relating to the status of application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.



Mark Blouin
Patent Examiner
Art Unit 2653
February 28, 2005



**WILLIAM KLIMOWICZ
PRIMARY EXAMINER**

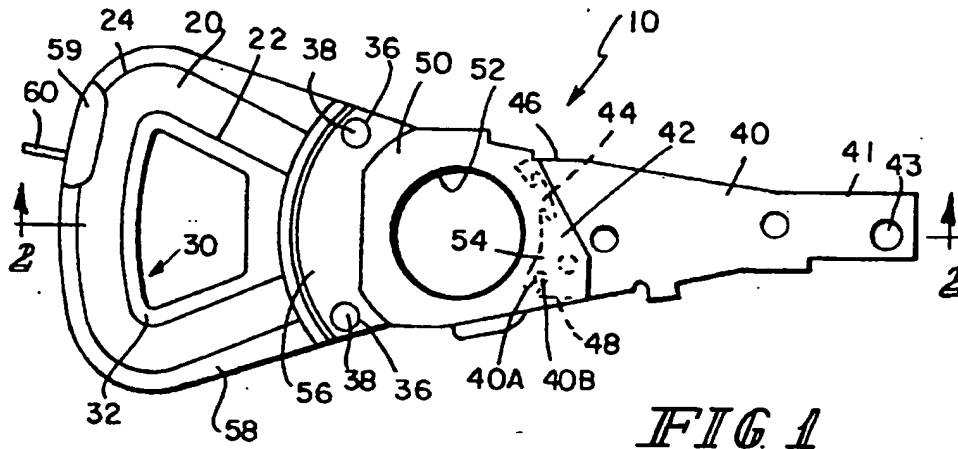


FIG. 1

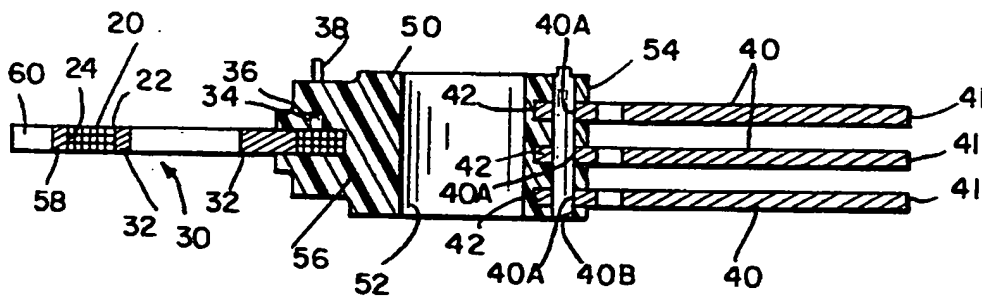


FIG. 2

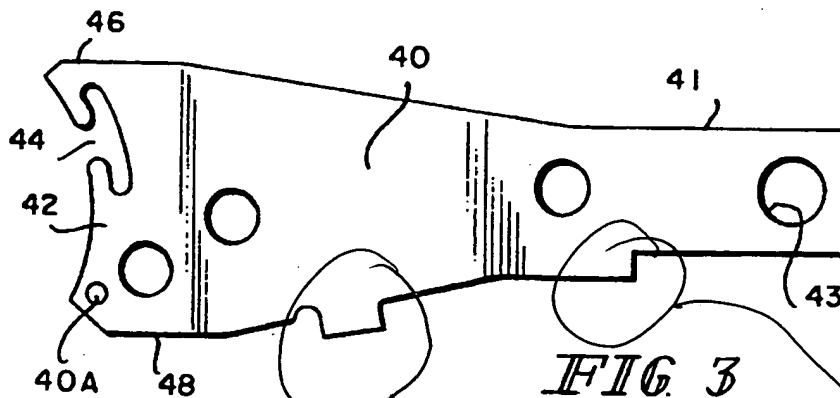


FIG. 3

protrusions

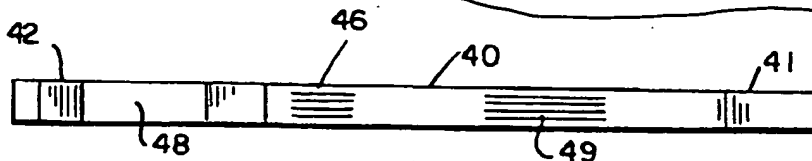


FIG 4

EXAMINER'S DRAWING